ABSTRACT OF THE DISCLOSURE

A method of determining the performance of a microprocessor during execution. The method is implemented using a microprocessor, an instruction counter and a cycle counter. First, the microprocessor is triggered into an emulation mode. The

5 instruction counter and the cycle counter is reset to zero. Assessment points are set up along a series of instruction whose operating speed needs to be determined. The microprocessor jumps from the circuit emulation mode into a normal operating mode and then executes a series of program instructions. The instruction counter increments by one when an instruction is executed. Similarly, the cycle counter increments by

10 one when one cycle of timing pulse is traversed. When an assessment point is encountered during instruction execution, the microprocessor jumps from the normal operating mode back into the circuit emulation mode. Microprocessor performance is evaluated by dividing the value inside the cycle counter by the value inside the instruction counter. If the value inside the counter reaches an upper limit, the

15 microprocessor jumps from the normal operating mode back to the circuit emulation mode After evaluating microprocessor performance, the microprocessor jumps into the circuit emulation mode again until all instructions are executed or another assessment point is encountered.